

Remarks

This Amendment is in response to the Office Action dated **January 24, 2008**.

The previous rejection of the present claims under 35 U.S.C. 112 and 35 U.S.C. 102(b)/103(a) wherein Burns et al. was employed as the primary reference have been withdrawn. Previous objections to the claims due to informalities have been withdrawn.

Election/Restriction

It is asserted in the Final Office Action that newly submitted claims 28-43, 72, 59-61, 63-70 and 73 are directed to an invention that is independent or distinct from the invention originally claimed for the following reasons:

Invention I, claims 1-41, 71 and 72, drawn to an uncured and a cured composition, classified in class 522, subclass various depending on the hydrophilic polymer;

Invention II, claims 44-58, drawn to a method of coating a substrate, classified in class 427, subclass 508; and

Invention III, claims 42, 43, 59-61, 63-70 and 73, drawn to a catheter assembly, classified in class 623, subclass.

Claims 59-61, 63-70 and 73 have been withdrawn from consideration as being directed to a non-elected invention. See 37 CFR 1.142(b) and MPEP §821.03.

Claims 44-58, drawn to a method of coating, may be rejoined upon finding allowable subject matter in the compositions claims and amendment of the method claims to be of the same scope as any allowable composition claims. The claims drawn to a non-elected species will be considered upon finding an allowable claim generic to the elected and non-elected species.

Claim Rejections

35 U.S.C. §112, second paragraph

Claim 33 has been rejected under 35 U.S.C. §112, second paragraph as being indefinite for failing to particularly point out and distinctly claim the subject matter. It is asserted that “[c]laim 33 recites a photoinitiator is an acrylated amine synergists are set forth in a Markush group of “photoinitiators”, however, acrylated amine synergists are not known to function as photoinitiators.”

As claim 33 is directed to an embodiment reciting that the “polymerizable alkoxyated (meth)acrylate is an ethoxyated trimethylol propane triacrylate”, Applicant presumes that this rejection should be directed to claim 37 rather than claim 33. Claim 37 has been amended to delete “acrylated amine synergists”.

Applicant respectfully requests withdrawal of the rejection of claim 37 under 35 U.S.C. §112, second paragraph.

35 U.S.C. §102(b)

The previous rejection of claims 1-9, 12, 16, 17, 21-23, 27-32, 34-36 and 41-43 under 35 U.S.C. §102(b) as being anticipated by Buscemi et al (5,693,034) has been maintained.

In the previous Amendment dated November 28, 2007, Applicant argued that Buscemi et al. failed to disclose the “polymerizable alkoxyated (meth)acrylates” recited in Applicant’s independent claim 1.

It is asserted in the Office Action that:

Applicant’s arguments filed 11-28-2007 have been fully considered but they are not persuasive with respect to Buscemi et al. Claim 1 recites “polymerizable alkoxyated (meth)acrylate”. Buscemi et al. specifically disclose alkoxyated

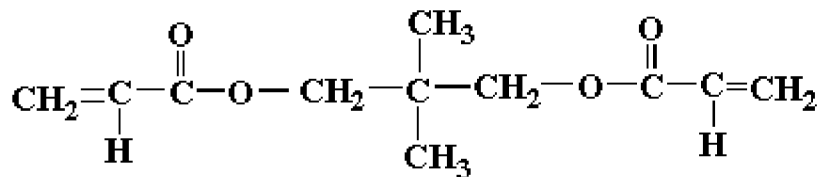
di(meth)acrylates, such as triethylene glycol di(meth)acrylate, tetramethylene glycol di(meth)acrylate and polyethylene glycol di(meth)acrylate, as being equivalent to neopentyl glycol diacrylate (used in the Example and discussed in applicant's remarks) in the disclosed compositions (column 2, line 56, to column 3, line 3). Thus, compositions taught by Buscemi et al. comprising an alkoxyated di(meth)acrylate anticipate the instantly claimed compositions and applicant's arguments are not found persuasive.

Final Office Action, page 4.

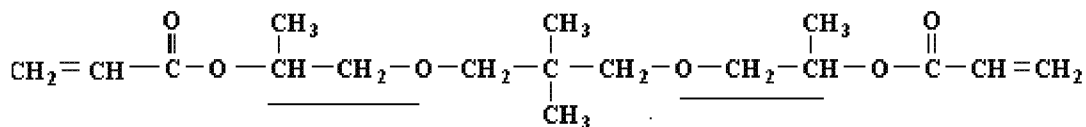
This is incorrect.

None of the acrylates listed in the paragraph above are alkoxyated acrylates as understood by those of ordinary skill in the art, and the neopentyl glycol diacrylate employed in the Buscemi et al. examples is not alkoxyated as disclosed in the present application and as understood by those of skill in the art.

Applicant, in the last Amendment mailed 11/28/07, provided chemical structures illustrating the difference between neopentyl glycol diacrylate and alkoxyated neopentyl glycol diacrylate. Applicant has again reproduced the structures below:



Neopentyl glycol diacrylate



Alkoxyated neopentyl glycol diacrylate

Applicant has underlined the two alkoxyate groups in the alkoxyated neopentyl glycol diacrylate that are not found in the neopentyl glycol diacrylate (no alkoxylation) to illustrate that these two structures are clearly different chemically. When an acrylate is alkoxyated, the alkoxyate groups are added in between the acrylate end groups, and the acrylate also typically includes a core or nucleus compound, i.e. the neopentyl glycol is the core or nucleus compound in this example. See, for example, US Patent No. 6436540, col. 6, lines 29-46..

However, in the laundry list of acrylates disclosed by Buscemi et al., Applicant submits that glyceryl propoxy diacrylate is disclosed. Buscemi et al. is silent as to any other alkoxyated acrylates., and is silent as to selecting alkoxyated acrylates having a water solubility of about 15% or greater. In fact, some aromatic acrylates that are included in the list of Buscemi et al. would fail to provide the requisite water solubility, and are clearly not preferred for use in the present invention.

Applicant has amended both independent claim 1 and 28 to recite a specific Markush group of alkoxyated (meth)acrylates not disclosed by Buscemi et al. Support is found on page 4, lines 27-35 and page 5, lines 1-16.

Independent claims 1 and 28 as amended are not anticipated by Buscemi et al.

Claims 2-9, 12, 16, 17, 21-23 and 27 depend from claim 1 and are not anticipated for at least the reasons that claim 1 is not anticipated.

Claims 29-32, 34-36 and 41-43 depend from claim 28 and are not anticipated for at least the reasons that claim 28 is not anticipated.

Applicant respectfully requests withdrawal of the rejection of claims 1-9, 12, 16, 17, 21-23, 27-32, 34-36 and 41-43 under 35 U.S.C. §102(b) as being anticipated by Buscemi et al (5,693,034).

35 U.S.C. §103(a)

Claims 10, 11, 13, 15, 24, 25, 33, 37, 39 and 40

Claims 10, 11, 13, 15, 24, 25, 33, 37, 39 and 40 have been rejected under 35 U.S.C. §103(a) as being unpatentable over Buscemi et al (5,693,034), as applied to claims 1-9, 12, 16, 17, 21-23, 27-32,34-37 and 41 above, and further in view of Bae et al (5,667,735).

It is asserted in the Final Office Action that:

With respect to claims 10, 11 and 33, it would have been obvious to one skilled in the art at the time of the invention to employ an alkoxyated alkane polyols having at least three acrylate groups, such as ethoxyated trimethylolpropane triacrylate, as the alkoxyated (meth)acrylate in the compositions disclosed by Buscemi et al. Buscemi et al provide motivation by teaching that vinyl monomers such as glyceryl propoxy triacrylate can be employed as well as the disclosed alkoxyated di(rncth)acrylates. Bae et al provide motivation by using ethoxyated trimethylolpropane triacrylate in the examples. One skilled in the art at the time of the invention would have been motivated by a reasonable expectation of providing an effective crosslinking monomer in the compositions disclosed by Buscemi et al.

With respect to claims 24, 25 and 40, it would have been obvious to one skilled in the art at the time of the invention to employ one or more of the additives taught by Bae et al in analogous compositions in the compositions disclosed by Buscemi et al.

With respect to claims 13, 15, 37 and 39, it would have been obvious to one skilled in the art at the time of the invention to employ any one of the photoinitiators corresponding to those set forth in instant claims 13, 15, 33 and 39, such as 2-methyl-1-[4-(methylthio)phenyl]-2- morpholino-propanone-1, disclosed by Bae et al for the axobisisobutyronitrile initiator in the UV curable compositions disclosed by Buscemi et al.

Final Office Action, page 6, bottom to page 7, top.

Applicants traverse the rejection.

Applicants submit that Buscemi et al. is directed to “[a] polymer network useful as a lubricous coating, the polymer network comprising a reaction product of a vinyl prepolymer and an uncrosslinked hydrogel retained within the reaction product such that the network exhibits a

greater lubricity when wet.” Abstract.

Bae et al., on the other hand, is directed to, “....a procedure for providing abrasion and scratch resistance for ophthalmic and other castable plastic lenses.” Summary of the Invention. The disclosure of Bae et al. is replete with reference to “hardened organic material” that renders the film abrasion resistant. See, for example, claim 1 and Summary of the Invention.

Bae et al. is silent as to any of the compositions therein being employed in a network that exhibits greater lubricity when wet.

Furthermore, Bae et al. tests the adhesion of their coating by “....soaking the lens sample in boiling salt water for one hour and then subjecting the coating to cross-hatch testing as described in ASTM D-3359. Acceptable adhesion means that none of the coating was removed during the test.” See column 14, lines 39-44. Such compositions would simply not be expected to provide lubricity when wet.

One of ordinary skill in the art would simply not combine the hard, abrasion resistant coatings employed for ophthalmic lenses disclosed by Bae et al. with Buscemi et al. wherein it is desirable that the compositions exhibit lubricity when wet, regardless of the components that Bae et al. is employing.

Applicant submits that while both of these references may be directed to coatings, the differences in function are so different that one of skill in the art simply would not combine them.

While Patent Office classification of references and the cross-references in the official search notes of the class definitions are some evidence of "nonanalogy" or "analogy" respectively, the court has found "the similarities and differences in structure and function of the inventions to carry far greater weight." *In re Ellis*, 476 F.2d 1370, 1372, 177 USPQ 526, 527 (CCPA 1973).

MPEP 2141.01(a).

Furthermore, the teachings of Bae et al. wherein hardness and abrasion resistance are desired, are simply not relevant to the problems encountered for a coating which becomes lubricious when wet. The teachings of each reference combined, must be pertinent to the problems relevant to the inventor. See MPEP 2141.01(a).

For example, Applicant is selecting (meth)acrylates that provide greater water solubility. See page 5, lines 11-12. Clearly, for Bae et al., wherein the coatings must withstand boiling in water, such water solubility is undesirable. See column 14, lines 39-44.

Therefore, the combination of Bae et al. and Buscemi et al. would simply not be made by those of skill in the art. Because this combination would not be made by those of ordinary skill in the art, Applicant respectfully requests withdrawal of the rejection of claims 10, 11, 13, 15, 24, 25, 33, 37, 39 and 40 have been rejected under 35 U.S.C. §103(a) as being unpatentable over Buscemi et al (5,693,034).

Claim 26

Claim 26 has been rejected under 35 U.S.C. §103(a) as being unpatentable over Buscemi et al (5,693,034) in view of Bae et al, as applied to claims 1-13, 15-17, 21-24, 27-37 and 39-41 above, and further in view of Wang et al (6,458,867). It is asserted in the Final Office Action that “Buscemi et al disclose compositions comprising difunctional reactive diluents comprise alkoxyated (meth)acrylates (columns 2-3). Bae et al disclose analogous compositions and teach conventional additives, such as adhesion promoters, therefore. Wang et al disclose hydrophilic lubricant coatings for medical devices.... It would have been obvious to one skilled in the art at the time of the invention to include a compound such as the amino silane taught by Wang et al in the compositions disclosed by Buscemi et al in order to take advantage of the

coupling properties of the silane compound.”

Applicant traverses the rejection.

As discussed above, one of ordinary skill in the art would not combine the abrasion resistant coatings of Bae et al. with Buscemi et al. Without Bae et al., the combination of Wang et al. and Buscemi et al., fails to render claim 26 obvious.

Applicant respectfully requests withdrawal of the rejection of claim 26.

CONCLUSION

Claims 1-13, 15-17, 21-37, 39-43 and 71 are pending in the application. Claims 14, 18-20, 38, 44-61, 63-70 and 73 have been withdrawn from consideration. Applicant has addressed each of the issues presented in the Office Action. Based on the foregoing, Applicant respectfully requests reconsideration and an early allowance of the claims as presented. Should any issues remain, the attorney of record may be reached at (952)563-3011 to expedite prosecution of this application.

Respectfully submitted,

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